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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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23696	7590	06/26/2006	EXAMINER	
QUALCOMM INCORPORATED			DAVIS, CYNTHIA L	
5775 MOREHOUSE DR.			ART UNIT	
SAN DIEGO, CA 92121			PAPER NUMBER	
			2616	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/871,479	<b>Applicant(s)</b> ABROL ET AL.	
	<b>Examiner</b> Cynthia L. Davis	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/11/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments, filed April 11, 2006, with respect to the rejection(s) of claim(s) 1-26 over Kumar in view of Jeong have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Kim reference (US 6519235). The RNCs of Kim are equivalent to the network servers of the present invention; they are distinct from MSCs (see Kim, figure 2, elements 14 and 15).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 12, 16, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear with respect to which claim element the PPP link is being resynchronized. The PPP link is never claimed in to be synchronization with anything.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under

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the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 9, 12, 14, and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim.

Regarding claim 1, a method for resynchronizing a PPP link is disclosed in Kim. Detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in Kim figure 6a (showing new and previous RNCs), and figure 2, elements 13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Determining whether the new base station is associated with a new network server, and re-synchronizing the PPP link if the remote station is associated with a new network server is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

Regarding claim 12, a method for re-synchronization of a PPP link is disclosed in Kim. Establishing a PPP link, detecting a condition that indicates whether PPP re-synchronization is required, determining whether the new base station is associated with a new network server, and resynchronizing the PPP link if it is determined that PPP resynchronization is required is disclosed in Kim, figure 6a (handoff between RNCs, or network servers, requires resynchronizing, the figure shows procedures that synchronize the existing PPP link with the PDGN and the new RNC so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

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Regarding claim 16, a computer-readable medium embodying a method for re-synchronizing a PPP link is disclosed in Kim. Detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in Kim figure 6a (showing new and previous RNCs), and figure 2, elements 13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Determining whether the new base station is associated with a new network server, and re-synchronizing the PPP link if the remote station is associated with a new network server is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

Regarding claim 17, a remote station apparatus is disclosed in Kim, figure 2, element 10. Means for detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in Kim figure 6a (showing new and previous RNCs), and figure 2, elements 13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Means for determining whether the new base station is associated with a new network server, and means for re-synchronizing the PPP link if the base station is associated with a new network server is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

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Regarding claim 18, a base station apparatus is disclosed in figure 2, elements 13. Means for detecting a trigger indicating whether a new remote station is associated with a the base station is disclosed in Kim figure 6a (showing new and previous RNCs), and figure 2, elements 13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Means for determining whether the base station is associated with a new network server, and means for re-synchronizing the PPP link if the base station is associated with a new network server is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

Regarding claims 3 and 14, the detecting comprising detecting a message indicating a handoff is disclosed in Kim, column 6, line 7.

Regarding claim 9, the network server comprising a IWF is disclosed in Kim, column 1, lines 13-16.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19, 21, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim.

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Regarding claim 19, a base station apparatus is disclosed in figure 2, elements 13 of Kim. Means for detecting a trigger indicating whether a new remote station is associated with a base station, the processor being further adapted to determine whether the base station is associated with a new network server is disclosed in Kim figure 6a (showing new and previous RNCs, or network servers), and figure 2, elements 13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Claim 19 further specifies that the detecting is done by a processor, which is not specifically disclosed in Kim. However, a base station would normally have a processor to carry out such functions. It would have been obvious to one skilled in the art at the time of the invention to have a processor do the detecting. The motivation would be to use the part of the base station that is normally used to carry out the functions of the base station. A receiver adapted to receive and a transmitter adapted to transmit PPP re-synchronization signals, the receiver and transmitter being connected to the processor, is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC via the BS transmitter and receiver so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

Regarding claim 23, a remote station apparatus is disclosed in figure 2, element 10 of Kim. Means for detecting a trigger indicating whether a remote station is associated with a new base station, and determining whether the new base station is associated with a new network server is disclosed in Kim figure 6a (showing new and previous RNCs, or network servers), and figure 2, elements

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13 and 14 (in order to be associated with a new RNC, the MT must be associated with a new BS). Claim 23 further specifies that the detecting is done by a processor, which is not specifically disclosed in Kumar. However, a base station would normally have a processor to carry out such functions. It would have been obvious to one skilled in the art at the time of the invention to have a processor do the detecting. The motivation would be to use the part of the base station that is normally used to carry out the functions of the base station. A receiver adapted to receive and a transmitter adapted to transmit PPP re-synchronization signals, the receiver and transmitter being connected to the processor, is disclosed in figure 6a (showing procedures that synchronize the existing PPP link with the PDGN and the new RNC via the BS transmitter and receiver so that the MT may continue to communicate via the same link) and column 6, lines 4-19.

Regarding claims 21 and 25, the detecting comprising detecting a message indicating a handoff is disclosed in Kim, column 6, line 7.

5. Claims 4, 11, 15, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Kumar.

Regarding claims 4, 15, 22, and 26, the detecting comprising detecting coming out of dormancy is missing from Kim. However, this is disclosed in Kumar, column 3, line 59-column 4, line 9 (disclosing the need for synchronization during the reactivation process). It would have been obvious to one skilled in the art at the time of the invention to resynchronize in the event of reactivation of the mobile. The motivation would be to allow the formerly dormant



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mobile to resume communications via a functioning dedicated channel, which it did not have during dormancy (Kumar, column 3, lines 62-65).

Regarding claim 11, the remote station functioning in a CDMA environment is missing from Kim. However, Kumar discloses in column 1, line 20, and PDSN system functioning in a CDMA network. It would have been obvious to one skilled in the art at the time of the invention to use the PSGNs of Kim in the CDMA system of Kumar. The motivation would be to provide high-speed data packet service in a common type of cellular environment (see Kim, column 1 lines 8-10).

6. Claims 2, 13, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Rasanen. The detecting comprising detecting an RLP reset is missing from Kim. However, Rasanen discloses in column 2, lines 35-37, and column 7, lines 4-6, that the RLP reset state causes the releasing of a connection when the quality of the link degrades to a certain level. It would have been obvious to one skilled in the art at the time of the invention to resynch the PPP connection when an RLP reset was detected. The motivation would be to resynch the remaining connections to the mobile terminal when it releases one of its connections.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Ludwig.

Regarding claim 5, the determining comprising whether a received packet is a control packet is missing from Kim. However, Ludwig discloses that control packets, such as LCP request packets and IPCP request packets, are

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exchanged whenever a link is established in column 4, lines 44-62. Kim further discloses in column 6, lines 35-62, synchronizing while establishing a new link. It would have been obvious to one skilled in the art at the time of the invention to use control packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

Regarding claim 6, the control packet comprising a LCP negotiation request is missing from Kim. However, Ludwig discloses that LCP request packets are exchanged when a link is established in column 4, lines 44-62. Kim further discloses in column 6, lines 35-62, synchronizing while establishing a new link. It would have been obvious to one skilled in the art at the time of the invention to use LCP request packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

Regarding claim 7, the control packet comprising a IPCP negotiation request is missing from Kim. However, Ludwig discloses that IPCP request packets are exchanged when a link is established in column 4, lines 44-62. Kim further discloses in column 6, lines 35-62, synchronizing while establishing a new link. It would have been obvious to one skilled in the art at the time of the invention to use IPCP request packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Kalliokulju. The re-synching being done only on the Um interface is missing from Kim. Kalliokulju discloses in column 4, lines 1-3, that the wireless communications device is coupled to the base station via radio interface Um. It would have been obvious to one skilled in the art at the time of the invention to do the synching on Um. The motivation would be to synch the connection between the mobile and the base station.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Basilier. The network server comprising a PDSN is missing from Kim. However, Basilier discloses in column 4, lines 2-4, use of a PSDN in a mobile network. It would have been obvious to one skilled in the art at the time of the invention to use a PDSN as the network server. The motivation would be to support packet communications.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600